



### Pearl Drum-X

The Pearl *Drum-X* is a five-piece programmable analog kit, capable of storing eight different drumkits in memory. The setup consists of four, small, octagonal pads measuring approximately 3" deep by 13" in diameter, and a bass drum pad which is 24" high, 19" wide, and 4" deep.

The playing surfaces of the snare/tom pads use a round double layer of rubber for a natural feel and decreased "impact shock." In the center of the bass pad is a circular rubber disc, surrounded by a chrome ring. This impact area "gives" a little when struck, approximating the feel of a real bass drum. There is a large steel plate at the bottom of the pad for pedal mounting. Two large tubular leg spurs fit into external clamp brackets on the sides of the bass drum pad. These legs are capped at one end, and have a small spike point on the other. The snare/tom pads accept Pearl's 7/8" tom-tom arms, and have provisions for the *Vari-Set* memory locks. A large T-screw beneath the pads secures them to their holder arms. All the pads have 1/4" input jacks.

The *Drum-X* brain is rack-mountable, and is equipped with a variety of digital and LED readouts. A large window on the face of the unit gives valuable programming information, such as kit number (1

through 8), parameter (marked with LEDs), selected pad (also with LEDs), and parameter value. Other LEDs are used to designate memory protection status, as well as trigger/sensitivity level. Sensitivity level is adjusted via a small rotary knob for each pad. Two other knobs control line-in level (from tapes or records) and headphone volume. There is no output volume control; output volume must be controlled at your mixing board.

Pearl uses a "step" system of programming on the *Drum-X*. The variables are pad select, parameter select, parameter value, and kit select—all done with push buttons, not the usual sliders or dials. The kit select section has eight buttons for instant call-up of any desired kit to program or play. Your selected kit reads out digitally. The other three sections have two push buttons each, with arrows marking up-down or left-right. The pad select push buttons allow you to choose which pad you wish to program. One button moves the window LED to the left; the other moves it to the right—simple enough. The parameter select buttons move the LED in that section across the eight programmable variables: pitch, bend, oscillator/noise balance, overtone, attack, filter, decay, and level. The parameter value buttons step from 0 through 19, giving 20 different levels of adjustment for each parameter. The value number you choose is read out digitally. My one complaint is that there is no lighting for the window itself, and therefore, all titles are difficult to read, especially in low-light situations. I have been told, however, that Pearl plans to correct this in the near future.

User-programming of the *Drum-X* is extremely easy to accomplish; it's simply a matter of pressing buttons and using your ears to arrive at the sound colors you want. Once you have made your programming decisions, a switch on the back of the brain allows you to protect all eight kits, kits 1 through 7 only, or none of them (in case you want to alter them further while playing). It should be mentioned that kits 1 through 7 are preprogrammed factory kits, but these may be modified if you so desire. The memory protect switch is very important on the *Drum-X*, because it gives you the option to either keep the kits you have or reprogram them.

The rear of the unit has 1/4" stereo line-in jacks and mono/stereo line-out jacks, as

# Electronic

well as separate pad inputs and outputs, should you want to give a mixer channel to each one. There are also two "mystery" jacks. I say "mystery," because the equipment and/or instructions are not available yet to operate these functions. The external trigger pin jack will trigger the pads from drum machines, sequencers, etc., and the kit select pin jack is for footswitch selection of kits 1 through 8. All pad cables are included with the *Drum-X* package, as well as one output cable.

Also available optionally is the *TUR-1* Rack mounting stand for the *Drum-X* brain. It is built of black steel, and has a single fold-down shelf to place the brain onto. (Strangely, there are no holes in the frame to screw-mount the *Drum-X* brain permanently via its rack ears.) Special stand/pedal packages are available as well. The *Drum-X* retails at \$1,299 without hardware, and as far as I can tell, only comes in black. There is also a "basic" *Drum-X* for \$999, which has two tom pads, the brain, and three cables. This, of course, may be added on to later.

Pearl's *Drum-X* is a great deal more professional than the *Fightman* (reviewed *MD*: Apr. '85). The unit is capable of some really good sounds, both Simmons-type and acoustic. I especially liked the factory's "Bill Bruford kit"! Programming is simple and quick, making the *Drum-X* a heavy challenger in the ever-widening electronic drumkit battle.



by Bob Saydowski, Jr.

# Drums: Part 5



## Roland DDR-30 Digital Drums

Roland has entered the electronic drum market with its *DDR-30 Digital Drums*. All the sounds are digitally generated by a rack-mountable brain. Roland's drum-pads have six-sided triangular shapes, with silver shells. The playing surfaces are constructed of particle board, then rubber, and then a black top film. I quickly got accustomed to the feel of the pads, as they are not all that unnatural. The pads' acoustic sound is somewhat subdued; stick sound is kept to a minimum.

The *PD-10* bass drum pad has two large side-mounted spur legs with pointed tips. It also has a pedal mounting plate with two sprung spur points. The bass drum pad has a circular strike area in its center, while the small *PD-20* pads have full playing surfaces. All pads have both XLR and 1/4" jacks. The *PD-20* pads are equipped with brackets to mount them onto L-arm holders (or they can mount on snare stands).

The *DDR-30* brain has six voices: bass, snare, and four toms. Each voice has four PCM digital sounds, and each voice may be modified in eight different "patches." The brain can hold eight complete drumkits in four separate banks, yielding a total of 32 possible drumkit combinations. An optional load/dump memory cartridge can expand this capability to 96.

The *DDR-30* comes with all kits as factory presets. However, these may all be user-modified over 16 parameters per voice. A large window on the face of the brain displays important program/modification information for bank number, kit number, voice name, patch number, parameter name, and parameter value. Various push-button switches operate the different functions, which are: Edit, Write, Patch Write, Bank Select, Kit Select, Voice Select, and Program Number. The modifier section has buttons for Edit Forward and Backward (step to specific parameter), Voice, Gate, Pitch, EQ, Sensitivity, Copy, Cartridge, and MIDI. There is also a slot for the optional memory data cartridge, plus a MIDI Message LED.

A large rotary wheel (called the *Alpha Dial*) allows variable degrees of "param-

terization" when modifying the preset sounds. The 16 parameters of each voice are arranged into four groups, and most use step numbers to vary their modification values. The editable parameters of the VOICE section are: Source Number (one of four digital sounds), Level (0-99), Decay (1-99), Attack (0-99), and Attack Decay (1-99). The PITCH section variables are: Pitch (two-octave range), Bend Depth (0-99), Bend Decay (1-99), and Dynamics Sensitivity (0-99). The GATE section varies the sudden "cut" of a sound using Gate Level 1 & 2 (0-99), Gate Release 1 & 2 (1-99), and Gate Time (0-99). The EQ section can adjust treble and bass frequencies. The *Alpha Dial* is designed to be continuously rotatable. When you reach the peak adjustment of 99, the dial still turns, but the number stops. It might be easier if Roland could arrange for it to recycle, starting at 0 again, rather than having to turn the dial all the way back to get to your initial starting point.

After you've made the modifications you deem necessary, you may either write the individual modifications into memory, or assemble them into drumkits and write them into memory. The *DDR-30* also has a Copy function to copy a specific sound into a different memory area, thus saving you time if you want to use a certain sound in different kits. All the factory presets can be recalled at the push of a button or two, but all the kits you have developed will be erased. So it's a good idea to save yours on cartridges—just in case. Understanding all the various functions is a bit complicated at first, but a reading of the well-written owner's manual will thoroughly explain everything. All operations are quite simple, once you know how.

The rear of the *DDR-30* brain has XLR jacks for each pad input, 1/4" jacks for separate pad outputs to your mixer, plus 1/4" jacks for left and right mix out. (It can also output in mono.) Three MIDI jacks are included, as this unit is MIDI-compatible all the way. Optional remote pedal switches are available for kit select and bank select, and of course, the brain has jacks for these. The *DDR-30* comes with two output cables, but for some reason, Roland does not include the XLR cables needed for the pads. Stands are also not included, but any L-arm type holder system will accommodate the small pads.

Roland's *DDR-30* setup has a very modern look, and the sounds are superb. From

acoustic drums to Simmons-type, from Latin drums to timpani, they are all clean, realistic digital sounds. (The timpani presets are the best I've heard!) The pads are very responsive—they will easily read a buzz roll—and dynamic sensitivity is very good. I have no complaints with the *DDR-30* system, and in fact, I am quite impressed with its sounds and capabilities.

The system is marketed in modular form, meaning that you can build up your setup whenever you desire. The *DDR-30* brain retails at \$1,195. The *PD-10* bass drum pad is \$195; the small *PD-20* pads are \$99 each. A five-piece setup retails for a reasonable \$1,796.



## JTG Drum-FX2

JTG has recently introduced a single, self-contained electronic drumpad with interchangeable sound chips, like the Simmons *SDS1*. The *Drum-FX2* uses 8-bit "compandable" ROM chips in 64K and 128K. The "compandable" format means decreased background noise during sound decay, unlike linear chips, which have a higher noise content. JTG currently offers 55 different digital ROM chips.

The unit is a round rubber-surfaced pad, with a 14" diameter. All controls for the unit are mounted in line with the pad at its bottom. Rubber stripping surrounds the pad's edges. The feel is much like a rubber practice pad, with good response and rebound.

Controls for the *Drum-FX2* are: volume/power, dynamic sensitivity, pitch sensitivity, decay, sweep (two waveforms),

